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#### REMARKS

Claims 1-180 are pending. Claims 39-180 are withdrawn. Claims 1-38 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1 and 7 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,365,339 to Daum et al. ("Daum"). Claims 1-7 stand rejected under 35 U.S.C. §102(b & e) as being anticipated by U.S. Patent No. 6,244,214 to Hebrank ("Hebrank"). Claims 1-38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Daum and Hebrank.

In order to expedite prosecution of the present application, Applicants have cancelled Claims 1-33 and have added new Claims 181-200. Applicants respectfully submit that Claims 34-38 and 181-200 are patentable over the cited references, either alone or in combination, for the reasons set forth below.

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## §112 Rejections Are Overcome

Applicants have amended the preamble of independent Claim 34 to recite "avian eggs", as indicated above. New independent Claims 181, 183, 188, 193, 195 and 200 also recite "avian eggs", as indicated above. In addition, the phrases "having a characteristic" and "selectively processing" have been removed from the claims. Accordingly, Applicants respectfully request withdrawal of the present rejections under 35 U.S.C. §112.

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# §102 Rejections Are Overcome

Applicants have cancelled Claims 1-33. Accordingly, the present rejections under 35 U.S.C. §102 are obviated.

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### §103 Rejections Are Overcome

A determination under §103 that an invention would have been obvious to someone of ordinary skill in the art is a conclusion of law based on fact. *Panduit Corp. v. Dennison Mfg. Co.* 810 F.2d 1593, 1 U.S.P.Q.2d 1593 (Fed. Cir. 1987), *cert. denied*, 107 S.Ct. 2187. After the involved facts are determined, the decision maker must then make the legal determination of whether the claimed invention as a whole would have been obvious to a person having ordinary skill in the art at the time the invention was unknown, and just before it was made. *Id.* at 1596. The United States Patent and Trademark Office (USPTO) has the initial burden under § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a prima facie case of obviousness, the prior art reference or references when combined must teach or suggest all the recitations of the claims, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. § 2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01(citing In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990)). As emphasized by the Court of Appeals for the Federal Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be clear and particular, and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. In re Dembiczak, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). In an even more recent decision, the Court of Appeals for the Federal Circuit has stated that, to support combining or modifying references, there must be particular evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. In re Kotzab, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

Furthermore, as recently stated by the Federal Circuit with regard to the selection and combination of references:

This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining

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whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." <u>W.L.</u> Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion....

In re Sang Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002).

Applicants respectfully submit that Claims 34-38 and 181-200 are patentable over Daum and Hebrank, alone or in combination. For example, amended independent Claim 34 recites a method of processing avian eggs according to gender, comprising:

identifying live eggs among a plurality of eggs;

inserting a probe into each egg through the shell of the egg and directly into the enlarged allantoic sac; and

withdrawing a sample of allantoic fluid from the allantois of each egg via each probe;

detecting a presence of an estrogenic compound in the allantoic fluid extracted from each live egg to identify a gender of each live egg, comprising:

dispensing allantoic fluid extracted from the live eggs into respective receptacles;

dispensing a biosensor into the receptacles, wherein the biosensor is configured to chemically react with an estrogenic compound in the allantoic fluid and change a color of the allantoic fluid; and

detecting a color change of the allantoic fluid within the receptacles; and

selectively injecting a vaccine into the live eggs according to gender.

Neither Daum nor Hebrank, alone or in combination, teaches or suggests the recited elements of amended Claim 34. For example, the following recited elements for extracting allantoic fluid are neither taught nor suggested by Daum or Hebrank:

positioning each of the live eggs in an orientation whereby an allantois of each egg is caused to pool and enlarge an allantoic sac under an upper portion of each egg shell;

inserting a probe into each egg through the shell of the egg and directly into the enlarged allantoic sac; and

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withdrawing a sample of allantoic fluid from the allantois of each egg via each probe;

In addition, the following recited elements for detecting a presence of an estrogenic compound in extracted allantoic fluid are neither taught nor suggested by Daum or Hebrank:

dispensing allantoic fluid extracted from the live eggs into respective receptacles;

dispensing a biosensor into the receptacles, wherein the biosensor is configured to chemically react with an estrogenic compound in the allantoic fluid and change a color of the allantoic fluid; and

detecting a color change of the allantoic fluid within the receptacles;

The Action fails to identify any passages within either Daum or Hebrank (or within any other reference) that teach or suggest the above-listed recitations of Claim 34. Moreover, the Action admits that "the references do not teach all of applicant's claimed steps nor egg manipulations." The Action then concludes that "all of applicant's claimed manipulations and assays, i.e. colormetric estrogenic compound determination, were old and well known in the art of egg production and egg-based vaccine production." The Action fails to provide any particular evidence from the prior art in support of its broad brush conclusion. As a result, the Action's conclusion is in direct opposition to the Federal Circuit's directive that there be particular evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected components for combination in the manner claimed. Accordingly, Applicants respectfully request withdrawal of the present rejections of Claim 34-38 under 35 U.S.C. §103.

In addition, Applicants respectfully submit that new Claims 181-200 are patentable. For example, new independent Claim 181 recites a method of processing avian eggs, comprising:

extracting material from each of a plurality of eggs; assaying the material extracted from each egg to identify eggs having one or more pathogens therewithin; and

removing eggs identified as having one or more pathogens.

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Neither Daum nor Hebrank, alone or in combination, teaches or suggests assaying material extracted from avian eggs to identify pathogens and then removing the eggs identified as having one or more pathogens.

New independent Claim 183 recites a method of processing avian eggs, comprising:

extracting material from each of a plurality of eggs; assaying the material extracted from each egg to identify gender of each egg; assaying the material extracted from each egg to identify eggs having one or more pathogens therewithin; and

removing eggs identified as having one or more pathogens.

Neither Daum nor Hebrank, alone or in combination, teaches or suggests assaying material extracted from avian eggs to identify gender and to identify eggs having pathogens and then removing the eggs identified as having pathogens.

New independent Claim 188 recites a method of processing avian eggs, comprising:

extracting material from each of a plurality of eggs;
performing genetic analysis on the material extracted from each egg;
assaying the material extracted from each egg to identify gender of each egg;
assaying the material extracted from each egg to identify eggs having one or
more pathogens therewithin; and

removing eggs identified as having one or more pathogens.

Neither Daum nor Hebrank, alone or in combination, teaches or suggests performing genetic analysis on material extracted from eggs, assaying material extracted from eggs to identify gender, assaying material extracted from eggs to identify pathogens, and then removing eggs identified as having pathogens.

New independent Claim 193 recites a method of processing avian eggs, comprising:

extracting material from each of a plurality of eggs; performing genetic analysis on the material extracted from each egg; assaying the material extracted from each egg to identify eggs having one or more pathogens therewithin; and

removing eggs identified as having one or more pathogens.

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Neither Daum nor Hebrank, alone or in combination, teaches or suggests performing genetic analysis on material extracted from eggs, assaying material extracted from eggs to identify pathogens, and then removing eggs identified as having pathogens.

New independent Claim 195 recites a method of processing avian eggs, comprising:

extracting material from each of a plurality of eggs; performing genetic analysis on the material extracted from each egg; and assaying the material extracted from each egg to identify gender of each egg.

Neither Daum nor Hebrank, alone or in combination, teaches or suggests performing genetic analysis on material extracted from eggs, and then assaying material extracted from eggs to identify gender of each egg.

New independent Claim 200 recites a method of processing avian eggs, comprising:

identifying live eggs among a plurality of eggs; extracting material from eggs identified as live eggs; and performing genetic analysis on the material extracted from each egg.

Neither Daum nor Hebrank, alone or in combination, teaches or suggests identifying live eggs from a plurality of eggs, extracting material from the live eggs, and then performing genetic analysis on the extracted material.

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### Conclusion

In view of the above, it is respectfully submitted that this application is in condition for allowance, which action is respectfully requested.

It is not believed that an extension of time and/or additional fee(s) are required. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

Respectfully submitted,

Bodd: II

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